

This listing of claims replaces all prior versions, and listings of claims in the instant application:

Listing of Claims:

1. (Amended) method of comprising communicating graphical display data directly between a window manager and at least one application in a network-based windowing system using an interface, wherein the window manager is responsible for controlling window layout within at least one workspace in accordance with predefined rules, the method further comprising:

communicating data directly between the window manager and the at least one application through ~~an~~ said interface in response to an information request to the window manager from the at least one application, wherein the communication involves:

storing the data in at least one repository included in the interface, and

retrieving the data from the at least one repository.

2. (Original) The method of claim 1, wherein the data communicated between the window manager and the at least one application includes workspace content information.

3. (Original) The method of claim 1, wherein the data communicated between the window manager and the at least one application includes information internal to the window manager if the information request from the at least one application comprises a request for information internal to the window manager.

4. (Original) The method of claim 3, wherein the at least one repository further comprises a command repository

associated with the window manager, wherein the command repository includes command information from command messages from the at least one application.

5. (Original) The method of claim 4, further comprising storing data corresponding to the information request in a request repository included in the interface and associated with the window manager, wherein the information request comprises a request for information internal to the window manager.

6. (Original) The method of claim 4, wherein the information request identifies the location of a data request repository included in the interface and associated with an application, wherein the data request repository holds an identification of the internal data requested.

7. (Original) The method of claim 3, further comprising storing, in response to an information request, requested items supplied by the window manager in a response repository included in the interface and associated with an application.

8. (Original) The method of claim 7, wherein the information request identifies the location of the response repository.

9. (Original) The method of claim 2, further comprising storing a notification of an event in an event notification repository included in the interface and associated with an application.

10. (Original) The method of claim 9, further comprising storing an identification of events requested by an application in an event request repository included in the interface and associated with the application.

11. (Original) The method of claim 10, further comprising polling the event request repository to identify event notifications requested by an application.

12. (Original) The method of claim 1, wherein the at least one repository comprises a dummy window.

13. (Original) The method of claim 1, wherein the at least one repository comprises one or more properties associated with a dummy window.

14. (Original) The method of claim 1, wherein the at least one repository comprises a dummy window associated with the window manager and a dummy window associated with an application.

15. (Amended) An interface for communicating graphical display data directly between a window manager and at least one application in a network based windowing system, wherein the window manager is responsible for controlling window layout within at least one workspace in accordance with predefined rules, the interface comprising:

at least one control module for controlling communication directly between the application and the window manager; and

at least one repository for storing data to be communicated directly between the application and the window manager.

16. (Original) The interface of claim 15, further comprising: a workspace information repository associated with the window manager, the workspace information repository being operable to hold workspace content information to be communicated from the window manager to at least one application; and

a query control module responsive to a request from an application for information regarding the content of a workspace to query the workspace information repository

for workspace content information to be returned to the application.

17. (Original) The interface of claim 15, further comprising a command request control module responsive to a request from an application for information internal to the window manager to cause the window manager to return the internal information to the application.

18. (Original) The interface of claim 17, wherein the command request control module is responsive to a command message from an application to place information representative of a command in a command repository associated with the window manager.

19. (Original) The interface of claim 17, wherein the command request control module is responsive to a request message requesting data internal to the window manager to place information representative of the request in a request repository associated with the window manager.

20. (Original) The interface of claim 17, further comprising a data request repository associated with an application, the data request repository being operable to hold an identification of the internal data requested, and a request message identifies the location of the data request repository.

21. (Original) The interface of claim 17, further comprising a response repository associated with an application, the response repository being operable to receive requested items supplied by the window manager in response to a request message.

22. (Original) The interface of claim 21, wherein the request message identifies the location of the response repository.

23. (Original) The interface of claim 15, further comprising:

an event notification repository associated with an application, the event notification repository being operable to receive a notification of an event from the window manager; and

an event control module for passing event notification requests between an application and the window manager.

24. (Original) The interface of claim 23, further comprising an event notification request repository associated with the application for receiving an identification of event notifications requested by the application.

25. (Original) The interface of claim 24, wherein the window manager is operable to poll the event request repository to identify event notifications requested by an application.

26. (Original) The interface of claim 15, wherein a repository is configured as a dummy window.

27. (Original) The interface of claim 15, wherein a repository is formed by properties of a dummy window.

28. (Original) The interface of claim 15, wherein at least one dummy window is provided that is associated with the window manager and at least one dummy window is provided that is associated with an application.

29. (Amended) A computer program product having stored thereon computer readable instructions for a method of comprising communicating graphical display data directly between a window manager and at least one application in a

network-based windowing system using an interface, the method further comprising:

communicating data directly between the window manager and the at least one application through ~~an~~ said interface in response to an information request to the window manager from the at least one application, wherein the communication involves

storing the data in the at least one repository included in the interface, and retrieving the data from the repository.

30. (Original) A graphical subsystem program element comprising a carrier medium carrying program code configured to form a graphical subsystem for displaying a window for at least one application, the graphical subsystem comprising:

a window manager operable to control window layout within at least one workspace in accordance with predefined rules; and

an interface operable to permit direct access between an application and the window manager, the interface being operable to provide at least one control module for controlling communication between the application and the window manager and at least one repository of data to be communicated between application and the window manager.

31. (Original) The graphical subsystem program element of claim 30, wherein the carrier medium is one of a storage medium and a transmission medium.

32. (Original) A computer system comprising:
a processor;
at least one display; and
a memory storing a graphical subsystem for

displaying a window for at least one application, the graphical subsystem comprising:

a window manager operable to control window layout within at least one workspace in accordance with predefined rules; and

an interface operable to permit direct access between an application and the window manager, the interface being operable to provide at least one control module for controlling communication between the application and the window manager and at least one repository of data to be communicated between application and the window manager.

33. (Original) The computer system of claim 32, wherein the graphical subsystem comprises program code held in the memory and operable to control the processor.

Amendments to the Drawings:

The attached sheet 4/16 of drawings includes changes to Fig. 5 and 6. Figs. 5 and 6 have been labeled "Prior Art." The attached sheet 5/16 of drawings includes changes to Figs. 7 and 8. In Figs. 7 and 8, "AP1" has been changed to "API" Sheet 4, which includes Figs. 5 and 6, and Sheet 5, which includes Figs. 7 and 8, replace the original sheets including Figs 5 to 8.

Attachment: Replacement Sheets